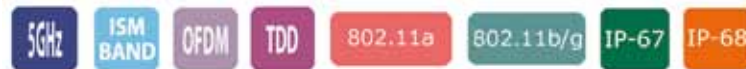# MERCURY SERIES Product Family Description
Multi-function Wi-Fi Radio ISM Band Outdoor Solutions with internal antenna.

MERCURY_PFD_ENC01W

Applications

- Enterprise / Campus Hotspot, Long distance P-T-P / P-T-MP (CPE) Bridge.

- Redundant link between buildings.

- Wireless Distribution System(WDS).

- Wireless Repeater.

- Dedicated ISP connections for high-reliability base stations and subscribers.

- Enterprises or Institutions LAN and PBX extension.

- Cost effective alternative to wired network environment.

- IP-67/IP-68, Enclosure rating for harsh environments.

5GHz | ISM BAND | OFDM | TDD | 802.11a | 802.11b/g | IP-67 | IP-68

MERCURY SERIES
Product Family Description
Multi-function Wi-Fi Radio ISM Band Outdoor
Solutions with internal antenna.

The Lanpro Mercury series provides large output power and high throughput options for ISM Band outdoor Wi-Fi radios. It operates at 2.4GHz and 5GHz unlicensed ISM band with OFDM/TDD technology and support 5 different operation modes – AP / Station / WDS(Bridge) / Repeater / Inter-building private LAN. That provides a turn-key solution for Hotspot, enterprise / campus connectivity, and PWLAN applications.

It's easier and more cost effective to deploy the wireless access environment with the Wireless Distribution System (WDS) technology. Saving 30% ~ 50% cost for telecom operators, ISPs and enterprises.

The Mercury series has powerful security management because it supports WEP 64 / 128 / 152 bits, 802.1x Authentication (EAP), MAC address filter, disable broadcast the SSID, client isolation and WPA-PSK / WPA(TKIP) / WPA2(AES-128bits) encryption. All these functions make the network much more secure and reliable.

A	Product Highlights

• Large area coverage

High output power for IEEE 802.11b/g and low noise figure extends signal transmit distance and enlarge the coverage area as well.

• High data rate at long distance

Break the distance limit of 802.11a/b/g standards. We succeeded in extending the signal up to 40 Km with the proper antenna.

• Flexibility

This radio can play various roles in the wireless infrastructure, the internal antenna makes the deployment much easier.

• QoS - Wi-Fi Multi-media (WMM)

With this feature, the radio can support quality of service for prioritizing traffic from the Ethernet to the access point.

• Security

WEP 64 / 128 / 152 bits, 802.1x Authentication (EAP), MAC access control, disable broadcast the SSID, client isolation, WPA-PSK, WPA-TKIP encryption and WPA2 (AES-128bits) build the highest security mechanism to prevent malicious attacks from the internet.

• Antenna Alignment (Audible antenna alignment for optional)

The site survey function provides the RSSI (signal strength) info to indicate the status of antenna alignment. Customer can order the audible antenna alignment model, and just align the antenna with the sound heard through a headphone, like the one of your mp3 player, easy and simple.

• Robust Construction

Prepared for harsh environments, the IP-67/IP-68 rating ensures long life operation.

B	Specifications

RADIO				
Model No.		**LP-288AI**	**LP-289AI**	**LP-5AI**
Standards		IEEE 802.11a	IEEE 802.11a	IEEE 802.11a
Frecuency		5GHz	5GHz	5GHz
OUTPUT POWER / RX SENSITIVITY (Packet Error rate :10%)				
64QAM (54Mbps)		17±1.5dBm/-71(dBm)	12±1.5dBm/-75(dBm)	20(±1.5) / -72(dBm)
16QAM (36Mbps)		19±1.5dBm/-81(dBm)	14±1.5dBm/-81(dBm)	22(±1.5) / -78(dBm)
QPSK (18Mbps)		20±1.5dBm/-84(dBm)	14±1.5dBm/-86(dBm)	23(±1.5) / -84(dBm)
BPSK (6Mbps)		20±1.5dBm/-89(dBm)	15±1.5dBm/-89(dBm)	23(±1.5) / -90(dBm)
CCK(DSSS)		N/A	N/A	N/A
Antenna Gain		12dBi	14dBi	23dBi
EIRP		32dBm	37dBm	46dBm
Modulation	OFDM/ (DSSS)			
Duplex	TDD			
Frequency Stability	±10ppm			
Range		20Km	13Km	20Km

INTERFACES

RF	N/U
Ethernet	IEEE 802.3(10 Base-T) / IEEE 802.3u(100 Base-Tx)

RSSI (Receive Signal Strength Indication)

Bridge Mode	Link Test
Station Mode	Site Survey
Antenna Alignment	Audible Antenna Alignment (beeper) Only in LP-5AI

MANAGEABILITY

Management and setup	Web-based configuration
Operating mode	AP / Station / WDS(Bridge) / Repeater / Inter-building private LAN
Network Architecture	Hot spot / PTP Bridge / PTMP Bridge / Repeater
Operating System	Windows 98 / 2000 / NT / XP
SNMP agents	MIB LP-289AI, MIB ll LP-5AI
Protocol	TCP/IP, IPX/SPX, NetBEUI
IP Routing	Enable anyIP
QOS	Wi-Fi Multi-media / Uplink speed limit
DHCP support	DHCP server / DHCP Client (LP-289AI only)
Other Features	VLAN / HTTP Re-direct / Virtual Servers / AP Channel Auto Selection / Station Fast Roaming / CPU Loading Monitor / Load Balance

SECURITY

Data Encryption	WEP (64/128/152 bits) / WPA-PSK / WPA-TKIP / WPA2 (AES 128bits)
Authentication	802.1x Auth.(EAP)
Authorization	MAC Access Control
Advanced Security	Disable Broadcast SSID / Firewall / Wireless Client Security Seperation (Layer 2 Isolation)

ENVIRONMENT

Operating Temperature		-30~55ºC	-30~55ºC	-30~55ºC
Storage Temperature		-30~70ºC	-30~70ºC	-30~70ºC
Humidity	95% non-condensing			
IP Enclosure Rating		IP-67	IP-67	IP-68

POWER

Power Supply	AC 100-264V 50-60Hz, LP-5AI DC 24 V, LP-288AI DC 15 V

PHYSICAL

Dimension	LP-288AI 197 (L) x 197 (W) x 70 (H); mm LP-289AI 197 (L) ×197 (W) × 70 (H); mm LP-5AI 259 (L) x 250 (W) x 75 (H); mm			
Weight		0.75Kg	0.8Kg	1.8Kg

WARRANTY

Validity	2 Years

C   How to order

- **LP-5ai** 5.8 GHz - 5 GHz Band, 802.11a, Outdoor Panel Integrated Antenna, IP-68 rated.

- **LP-288ai** Small and Compact 5.8GHz OFDM Outdoor Radio 5/10/20MHz Fractional bandwidth, IP-67 rated.

- **LP-289ai** 5.8 GHz - Antenna Integrated Medium Range AP, IP-67 rated.